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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,383	12/27/2001	Christopher Pasqualino	13311US02	8696
23446	7590	09/22/2004		
MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661			EXAMINER HARVEY, DAVID E	
			ART UNIT	PAPER NUMBER
			2614	

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/034,383

Applicant(s)

PASQUALINO ET AL.

Examiner

DAVID E HARVEY

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/21/2002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1, 2, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by 1988 IBM Technical Disclosure #NN8812461.**

The IBM Technical disclosure describes an interface for interfacing a controller/PC system and its CRT display. As describe the interface includes circuitry for "encoding" video for transmission between the controller/PC system and its CRT display, wherein the interface includes:

1) A multiplexer for **concatenating** at least one bit of data (e.g. that which represents horizontal sync, vertical sync, and/or the serial data channel signal/command data) to the red, green, blue, and intensity component of the video signal; and

2) A block code arrangement for **balancing** the entire multiplexed data stream, via the utilization of only "balanced" codes, thereby "eliminating low frequencies from the spectrum" while permitting "AC coupling".

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 3 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over 1988 IBM Technical Disclosure #NN8812461.**

I. The IBM Technical disclosure describes an interface for interfacing a controller/PC system and its CRT display as was set forth above with respect to the limitations of claim 1.

II. Claims 3 and 7-11 differ from the system described in the technical disclosure only in that said claims recite steps for correcting the video signal for erroneous pixels caused by transmission errors via various forms of pixel replacement (i.e. via replacement with a previously received correct value or a value obtained by the

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interpolation/averaging of surrounding correct pixel values);

III. The examiner takes Official Notice that it was conventional to have added overhead bits/data (e.g. such as CRC codes and/or hamming bits) to transmitted video data to detect and correct erroneous pixel values caused by transmission errors; i.e. wherein substitution and interpolation represent notoriously well known ways of generating replacement pixel values.

IV. The examiner maintains that it would have been obvious to one of ordinary skill in the art to have modified the interface described in the IBM technical disclosure with such conventional overhead data to allow erroneous pixels to be replace using well known pixel replacement techniques thereby advantageously providing improved performance (i.e. noise immunity).

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5. Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over 1988 IBM Technical Disclosure #NN8812461.

I. The IBM Technical disclosure describes an interface for interfacing a controller/PC system and its CRT display as was set forth above with respect to the limitations of claim 1.

II. Claims 4 and 6 differ from the system described in the technical disclosure only in that said claims specify said concatenated data as being "audio" and "status" data/information.

III. The examiner maintains that it would have been obvious to one of ordinary skill in the art to have used the "data channel" of the interface described in the IBM disclosure to carry any kind of auxiliary data that was conventionally associated with transmitted video data (i.e. be it sound/audio or status information).

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6. Claims 12, 13, 18, 20, 21, 22, 23 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over 1988 IBM Technical Disclosure #NN8812461.

I. The IBM Technical disclosure describes an interface for interfacing a controller/PC system and its CRT display as was set forth above with respect to the limitations of claim 1.

II. The claims differ from the system described in the technical disclosure only in that the claim indicates that the data component to which at least one is concatenated is obtained by "splitting" the component out from input data. The IBM disclosure does not specify the source of the red, green, blue, and intensity video component described therein.

III. The examiner takes Official Notice that it was notoriously well known in the art for the video that is transferred between a controller/PC and its CRT display to have been originated from a composite signal source thereby requiring the "splitting" of the video components prior to transmission. The examiner maintains that it would have been obvious to one of ordinary skill in the art to have utilized the interface described in the IBM disclosure to

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have "split" and conveyed data from such conventional source as was known in the art.

7. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over 1988 IBM Technical Disclosure #NN8812461.

I. The IBM Technical disclosure describes an interface for interfacing a controller/PC system and its CRT display as was set forth above with respect to the limitations of claim 12.

II. Claims 15 and 16 differ from the system described in the technical disclosure only in that said claims recite the addition of CRC codes to the transmission;

III. The examiner takes Official Notice that it was conventional to have added overhead bits/data (e.g. such as CRC codes and/or hamming bits) to transmitted video data to detect and correct erroneous pixel values caused by transmission errors;

IV. The examiner maintains that it would have been obvious to one of ordinary skill in the art to have modified the interface described in the IBM technical disclosure with

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such conventional overhead data to allow erroneous pixels to be replace using well known pixel replacement techniques thereby advantageously providing improved performance (i.e. noise immunity).

8. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over 1988 IBM Technical Disclosure #NN8812461.

I. The IBM Technical disclosure describes an interface for interfacing a controller/PC system and its CRT display as was set forth above with respect to the limitations of claim 22.

II. Claim 24 differs from the system described in the technical disclosure only in that said claim recites the addition of CRC codes to the transmission;

III. The examiner takes Official Notice that it was ~~conventional to have added overhead bits/data (e.g. such as~~ CRC codes and/or hamming bits) to transmitted video data to detect and correct erroneous pixel values caused by transmission errors;

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IV. The examiner maintains that it would have been obvious to one of ordinary skill in the art to have modified the interface described in the IBM technical disclosure with such conventional overhead data to allow erroneous pixels to be replace using well known pixel replacement techniques thereby advantageously providing improved performance (i.e. noise immunity).

9. Claims 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over 1988 IBM Technical Disclosure #NN8812461.

I. The IBM Technical disclosure describes an interface for interfacing a controller/PC system and its CRT display as was set forth above with respect to the limitations of claim 12.

II. Claims 17 and 19 differ from the system described in the technical disclosure only in that said claims specify said concatenated data as being "audio" and "status" data/information.

III. The examiner maintains that it would have been obvious to one of ordinary skill in the art to have used the "data channel" of the interface described in the IBM disclosure to carry any kind of auxiliary data that was

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conventionally associated with transmitted video data (i.e. be it sound/audio or status information).

10. Claims 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over 1988 IBM Technical Disclosure #NN8812461.

I. The IBM Technical disclosure describes an interface for interfacing a controller/PC system and its CRT display as was set forth above with respect to the limitations of claim 22.

II. Claims 25 and 27 differ from the system described in the technical disclosure only in that said claims specify said concatenated data as being "audio" and "status" data/information.

III. The examiner maintains that it would have been obvious to one of ordinary skill in the art to have used the "data channel" of the interface described in the IBM disclosure to carry any kind of auxiliary data that was conventionally associated with transmitted video data (i.e. be it sound/audio or status information).

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11. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over 1988 IBM Technical Disclosure #NN8812461.

I. The IBM Technical disclosure describes an interface for interfacing a controller/PC system and its CRT display as was set forth above with respect to the limitations of claim 12.

II. Claim 14 differ from the system described in the technical disclosure only in that said claims specify said split data is eight bit color pixel data; i.e. the data in the IBM disclosure appears to be 4 bit color pixel data.

III. The examiner takes Official Notice that it was well known in the art for the video data that is transferred from a controller/PC to a CRT display to have comprised eight bit (or greater) color pixel data.

The examiner maintains that it would have been obvious to have modified the interface described in the IBM disclosure to transmit video data having at least eight bits thereby providing a larger pallet of colors (i.e. a "real" image capability). Obviously, the number of balanced codes would have been expanded accordingly.


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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID E HARVEY whose telephone number is (703) 305-4365. The examiner can normally be reached on M-F from 6AM to 3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).


DAVID E HARVEY
Primary Examiner
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